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SCHOOL AND SOCIETY

Volume XVII SATURDAY, FEBRUARY 3, 1923 Number 423

REORGANIZING PERU'S SCHOOLS

THE public school system of the Republic of Peru is a national disgrace. The schools are miserably housed, so miserably that it would be almost impossible to describe the situation to an American who had never visited the country. American health officers would doubtless close ninety per cent. of the schools as constituting a menace to public health. The schools are almost entirely lacking in books and supplies and there are whole provinces that do not possess a single school desk. Excepting in the larger centers of population there are no sanitary facilities and the resulting conditions in and around the school building offend the eye and nose and make it difficult for one to remember that he is in a country that makes claims to culture and refinement. Teachers are poorly and irregularly paid, and at this moment there are hundreds of teachers that have not been paid from three to twelve months. Their tenure is insecure and political interference may at any time terminate the employment of the most efficient teacher. Since the poor teacher enjoys political influence generally, it is often more difficult to remove him than the best. The attendance is one seventh of what it should be. There is practically no provision for industrial and agricultural education in primary and secondary schools and very little attention is given to physical education outside the larger centers. School funds are in the hands of the Minister of Instruction who is generally a politician who can see no great opportunity for winning glory in the careful exercise of his functions and who generally prefers granting scholarships and subsidies to the more prosaic task of seeing that funds are invested in the payment of teachers and the purchase of needed supplies. It is indeed pitiful to see a minister voting subsidies to poets and musicians, purchasing books that have no value for educational purposes, naming a multitude of unnecessary employees, when teachers remain unpaid and when the administration of the schools is able to continue only because the officials responsible for it are willing to advance money to buy needed office supplies. In secondary schools there are no teachers who devote their whole time to instruction. For the most part they are lawyers, doctors, engineers and priests who eke out their income by teaching. Once the lecture is delivered they leave and are at no time responsible for discipline, special monitors being employed for this purpose. The teaching is generally execrable. Politics has dominated public school administration and when one uses the term politics he is disposed to present excuses to the politicians of our own country who know what they want and apply intelligent methods to secure it, even when their objectives may not be the most approved. Since there is no real freedom of elections in Peru, there is no real politics. Personal whims, a desire to please everyone, inability to say no, misplaced sympathy, plain everyday graft—all are lumped together with what we might call true politics constituting the basis of Peruvian politics. The very best minister is likely to know nothing of education, for unless he has been outside the country, no Peruvian has ever seen a model school plant. There is no chance

that he has been educated in a public school and therefore his sympathy is likely to be with private rather than public schools and at any rate he sees more chance of currying favor by subsidizing private schools than by aiding public ones.

For ten years or more the government of Peru has had it in mind to reform its public school system and in 1909 a group of Americans were employed and set to work. Mr. J. A. McKnight was appointed director of the normal school for men, Mr. J. B. Lockey inspector of the department of Lima, Dr. Albert A. Gieseke rector of the University of Cuzco, Miss Grace Carnahan inspector of girls' schools of Lima and Dr. Harry Erwin Bard adviser to the Minister of Instruction. Of this group all but one returned to the United States several years ago. Dr. Gieseke still remains as rector of the University of Cuzco. Dr. Bard, to whom reference will be made later, remained until 1912 and again returned in 1919. A considerable number of German and Belgian teachers were also employed and many are still in the service.

Three years ago the government of President Augusto B. Leguia, also president in 1909, decided to take definite steps toward a complete reorganization of the entire school system. A commission was appointed and after long discussion a new school law was framed and presented to the government by its president, Dr. Vicente Villaran, now rector of the University of San Marcos. Congress authorized the president to approve and promulgate a new organic law of instruction and July 1, 1920, the new school law was put into effect. The new law represented the project of Dr. Villaran with certain modifications made by private school interests, by the adviser to the minister and by the minister himself, and certain last hour changes made by certain persons who revised the proofs. There is now no way of knowing just what the law was as originally approved by the government. It is sufficient to say that the law as it now stands contains many contradictory articles and above all is not based on the educational experience of the country. Laws are often merely decorative in Peru and so this does not matter as much as one might think.

It is difficult to say just how far the government studied the situation and to what extent it was definitely informed of the true situation. It is just as difficult to determine what the original plans were and it is not at all easy for one on the ground to know what its present intentions are. The chief aim of these governments is to get through the day as pleasantly as possible and leave the rest to fate. At any rate it seems that there were fairly definite plans to employ two hundred Americans and a thousand Germans. An agent was sent to Germany to close contracts, but his orders were finally cancelled. He had the trip and one cannot be quite sure that this was not the real motive after all. Still, the president early in 1921 stated that the government planned to bring a number of Germans. It was hinted by certain high officials that the Germans were to be employed to improve the native races rather than as teachers of the youth. It was hoped they might have time for both. Whatever the plan was it is very clear that nobody took the pains to figure out the cost, for the salaries of the Americans and Germans would exceed the total annual appropriation for education in 1922.

In July, 1920, Dr. Harry Erwin Bard, who had been adviser to the Minister of Instruction for the second time since 1919, was sent to the United States to employ a small group of American educators. Men were to be secured for six administrative positions, three to organize the schools of the new University of Technical Schools, one to direct student activities in the University of San Marcos, and a number of others for secondary positions. Accord-

ing to the contract of Dr. Bard with the government he was to organize a *junta consultiva* or advisory board, consisting of the six administrators and himself. Further reference will be made to this board. The University of Technical Schools to be established was to consist of the Superior Schools of Pedagogical Sciences, of Manual Arts and of Commerce, which were to be organized by Americans, and the Schools of Arts and Trades, of Agriculture and of Engineering already organized years ago.

Once in the United States Dr. Bard began to advertise the wishes of the Peruvian Government and circulars were sent to many persons who might be interested. These circulars were sent to Lima to responsible officials and therefore had the tacit approval of the government, if not its definite approval. Furthermore, the contract between Dr. Bard and the Peruvian government gave him full authority to employ the administrative members of the group. Of Dr. Bard's right to speak for the government of Peru there has been no doubt whatever. The circulars stated that the salaries of fifteen men would average around $6,000. In certain cases men asked that salaries be $7,000 either with or without counting vacation privileges. These men were told that a salary of one hundred ten pounds would equal this sum, and that salaries would be fixed in pounds for convenience. Verbally and in writing men were told that the Peruvian pound could not fall in value below $4.80 and that any losses due to fall in exchange would be made good by the government.

The men were to enjoy the ample authority granted by law and were to be given great liberty of action. A large part of the correspondence was carried on with letterheads reading "Ministry of Instruction, Junta Consultiva (Advisory Board, Lima, Peru)." The administrators were to form this board and after careful study were to lay before the government the program which they wished to recommend. Those who were anxious to know if they would be given facilities for beginning work without great delay were told that funds were ready to permit an early start. The director of schoolhouse construction would have money for materials for doors, windows, floors and roofs and could begin at once to induce local governing bodies to furnish the labor and adobes for the construction of smaller buildings. The director of the Superior School of Pedagogical Sciences could begin work the week of his arrival in Lima. Similar statements were made to others. The annual sum available for primary education would be about $4,000,000 and would rapidly increase. A half million would be available for the university and a similar sum would probably be available for books and supplies. In passing it may be said that the annual sum available for primary education has never passed $2,500,000, the university has never had more than $125,000 and this year about $5,000 will be spent for school supplies. In a general way the Americans were told that Peru offered a better chance for constructive service than any other country outside of their own. The Peruvian experiment would exceed in importance the Philippine. In short, hopes and facts were rather recklessly confused. Other minor misstatements were made, such as that the climate of Lima was excellent, the members of the group would need motorcycles and living was cheaper than in the United States. The climate of Lima is atrocious, there are almost no roads fit for motorcycles and living is very much more expensive in Lima.

Dr. Bard returned to Lima the latter part of December, 1920. The twenty-four men employed were all ready for work by March first. It was expected that a Peruvian would be named director general of instruction but Dr. Bard in addition to his post of adviser was also named director

general. At once the situation changed. The advisory board was not desired, and there was no evident intention of permitting the members of the group to enjoy the powers given them by law.

At the first meeting of the group the men were told that they would be responsible for the collection of their pay. In fact this constitutes a man's job in itself. For the past five months there are a number of the group who have found it more than they can do. They were told to remain in obscurity and not encouraged to make connections with the influential elements of the country. They were not encouraged to discuss plans and policies with one another, and in fact it was only after a very bitter discussion that a rule was eliminated that forbade them to talk matters over in the general office without the express approval of Dr. Bard. It was very clear that a policy of suppression had been determined upon. In the light of the experience of the past two years one is tempted to laugh every time he recalls an expression used by Dr. Bard that these Americans were to be the "guests of the Peruvian Nation." Although 1921 was the year of the anniversary of the centenary of Peruvian independence, when she extended a welcome to strangers from every part of the world, the members of the American group received no invitations whatever. Invitations given to clerks and even porters were not extended to them. The American fleet was in the harbor of Callao at that time and those of the group who secured invitations to visit it did so through the French Military Mission or from other sources. The hint was not lost and it was made very clear at the outset that it would be perfectly proper and safe to attack this group of "guests of the Peruvian Nation." The attacks have continued to this date and the only defense or explanation made by the Peruvian government have been based on purely local political motives. The policy of repression was carried to the extreme of opposing a courtesy call on the minister on his birthday. The suggestion brought out an angry statement to the effect that a minister would resent their presence.

The men had great difficulty from the beginning in collecting their pay, and certain members of the group who have families have suffered severely by reason of the failure of the government to pay salaries for months. At present a number have not been paid since February. The pound refused to conform its action to the rules laid down by Dr. Bard and insisted on demonstrating that it could go below $4.80. By the time the men had arrived it had reached four dollars and it steadily fell until it reached $3.15. Since then it has advanced but now remains at about $4.05. Men who were to draw six and seven thousand found they were to receive little more than four. The government met the situation by authorizing payment of the difference, but a little later the order was suspended for political reasons and high officials of the government promised that payments would be begun in January, 1922. Nothing has been done and it seems clear that the government has no intention of carrying out its promises.

The advisory board which was to be created was not organized, and so the group has been without means to act as a group and present plans to the government. The public is under the impression that the group constitutes a mission and attacks are based on that supposition. The use of the letterhead and the failure to carry out the provision of the contract of Dr. Bard providing such a board constitutes nothing less than a fraud, but this is simply one of a series practiced on these Americans.

To make matters worse the Minister of Instruction has until recently been a man without interest in instruction further than the appointment of favorites, who for the

most part are utterly lacking in preparation for the teaching service. Furthermore, he combined with a lack of ability a desire to display his authority in a most arbitrary manner. For this he is generally known as the "black peacock." Fortunately a man of ability and experience has been named recently, but conditions have reached such a point that it is not clear that he can do much to remedy it.

From the beginning it was clear to all the group that the financial situation was desperate and that there was no hope of improvement for several years. They wished to do the possible instead of waiting for the increased funds which had been promised. This met with angry disapproval and they were told that there would be no lack of money and that a modification of the larger plans would be fatal. At a time when it was not possible to pay small bills, when the director general himself had to sign a note to guarantee the payment for typewriters and when firms said they would give credit to the Americans as individuals but could not accept orders on the treasury, there were long and tiresome discussions of the way in which they were to plan to spend the one million four hundred thousand pounds that would be available. Any suggestion that such sum might not be available was met as an evidence of treason. The director of schoolhouse construction had an appropriation of £25,000 of which he was able to collect £200 during the year. The director of the School of Pedagogy was left for months without funds or facilities and finally presented a plan for beginning work with £150. This he could not collect, so he went home. Others did likewise, leaving only those who are incurably optimistic. Although the law provides that instruction is to receive 10 per cent. of national revenues plus the income, the appropriation for 1922 has been based on 5 per cent.

In spite of the hopeless financial situation, Dr. Bard left for the States in September, 1921, to hire twenty more men. It was clear that the government would do well to pay those already in its service, and an attempt was made to dissuade him from going. After his arrival in the States cables were sent him not to hire more men. Dr. Bard returned in December and in March was removed.

In the reorganization Dr. Lester M. Wilson, who came to Peru as director of examinations and studies, was named director general of instruction, still retaining his former post. Frank L. Crone in addition to his position as director of schoolhouse construction was named regional director of the center. John K. Breedin and Glenn W. Caulkins continue as regional directors of the north and south. In addition to these there are four directors of colegios or secondary schools preparing for the university and five engaged in office and supervisory work. The new administration set to work in March to make the best of a situation that was clearly next to hopeless and has struggled along as best it could without adequate funds and facilities. The appropriation is less than one third the estimate of the former director general. One of the principal tasks of the new administration is to provide for the early return of all or almost all the men still in Peru. The future is too uncertain to take any risks and it would not be wise to leave men in distant provinces with no assurance that they would be paid. At the moment of writing this the wife of one of the Americans is lying dangerously ill in a distant province where she has been compelled to remain because her husband has not been paid since February. Under the former administration the sum of fifteen thousand dollars was turned over to the supposed agent of a responsible American firm for school desks, and although the members of the present administration have no personal responsibility they find themselves embar-

rassed very much by the fact that there is no possibility that these desks will ever be delivered.

In spite of the lack of funds and authority something has been accomplished. Standard plans for school buildings have been drafted. Regulations governing primary and secondary schools have been prepared along with courses of study for all grades. Three regional offices have been organized and the work of administration and supervision has been systematized. To a degree they have succeeded in reducing the amount of graft and favoritism and have made the tenure of good teachers much safer. Still, when all is said, the game is not worth the candle unless the Peruvian Government can bring itself to the point of deciding what it wants to have done and to what extent it will support those who are to do it. These men must have funds at their disposal and must be given definite powers, wide as they can be but above all definite. There is little chance that the Peruvian Government can do this, for making up its mind is next to impossible and following out a definite and continuous line of policy is altogether impossible.

In a general way it should be said that no group of American educators should ever be organized for Peru, or for any Latin-American country for that matter, without the intervention of our own government. The head of such a mission should be a man of reputation, of wide experience and above all a man of flexible mind who can adjust himself to unfamiliar conditions. The men of such a mission would necessarily be of different types and therefore the head of the mission should be a man of wide enough sympathies to appreciate men of types different from his own. Above all the conditions of service should be so carefully described that no frauds will be possible. Those who form the mission should be prepared to find also that while there is general interest in education, there will probably be no real enthusiasm on the part of those who hold the reins of power. Popular education would perhaps endanger their position socially and economically, and they are not too anxious to have overmuch of it. One must expect to find his steps dogged by a host of critics whose articles, however libelous, will find ready acceptance in the newspapers of the Republic. It is very certain that the government will take no steps to protect the foreigner unless it fits in with the political program and one's only recourse would be the duel, which is still a recognized method of satisfying offended honor in Peru. Everything considered, it would doubtless be just as well to keep our educators at home or send them where they will be truly welcome. It is quite the vogue to flatter Uncle Sam these days when he is the nations' banker, but it will be many years before Peru will have any real conception of the value of an efficient public school system along American lines.[1]

[1] The foregoing was written by one of the American educators who went to Peru as a member of the American Educational Mission in December, 1920. As he still remains in that country and occupies an important administrative position in the Peruvian Department of Education, he wishes for obvious reasons to remain anonymous. His article is written not in a spirit of complaint or criticism, but in the hope that a wider knowledge of the conditions which were encountered by the American educators in Peru may result in arousing the interest of responsible officials both in this country and Peru.

Eight of the twenty-four Americans who went to Peru in the winter of 1919 and 1920 remained in that country. In spite of a lack of funds and local opposition, which has by now been largely overcome, some progress has been made in reorganizing Peru's educational system.

The undersigned, who was a member of the original educational mission, returning to the United States at his own expense, in December, 1921, can vouch for the accuracy of all statements made in the article.

FORREST B. SPAULDING,
Formerly Director de Bibliotecas y Museos Escolares, Lima, Peru

CIVIC TRAINING IN THE COLLEGE

WE used very often to hear it said that a college education prepared students for life. We are now beginning to hear that it is a way of life. One does not prepare to live at college; he lives. And after commencement day he goes on living in a similar fashion. If the fashion is dissimilar the breach evidences the futility of the college training. The only apology for four years spent at college lies in the fact that here we have an environment which tends to the development of right habits of living: habits that will continue to operate after the pressure of college life has passed.

Our various departments of learning should lead one into such habits. A part of the time in college is taken up with the study of literature. The value of such study is measured only by the degree to which there has been built up a permanent habit of reading good literature. If the idea is to mill about over the literary field to the end that the pleasurable and profitable reading may be inaugurated in the years to come, the result is flatly disappointing. People do not work very effectively for the doubtful rewards of far distant days. One learns to be an athlete by playing ball.

In like manner one becomes a good citizen by the practice of the art. A good program of civic training is a program which leads young citizens into action. It gets them at the job. It plunges them into a sort of activity that is not a preparation at all, but a participation. Such a demand for participation is often misunderstood. Not long ago the community civics people were chasing students of all grades about the premises of the city, dabbling in the administrative operations, making no distinction between the sort of work which is delegated to officers more or less expert and the activity appropriate to the private citizen.

Now in a democracy the activity in which the citizen should engage is chiefly mental. His operations are political. His field is that of opinion. He needs to do three things: to get hold of adequate data concerning the vital problems of the day; to think discriminatingly concerning these matters and to give effective utterance to his conclusions. While in college he ought to be doing these three things.

The college which undertakes to promote effective activity along these lines on the part of its students is assuming a considerable task. In an increasingly complex society the gathering of data upon which opinion may safely be built becomes a stupendous undertaking. We are constantly facing labor crises. In order to form an opinion the citizen needs reliable data. He must know the facts. He must know what is the level of wages and prices, how great are the profits of the companies, what are the working conditions, what contractual conditions have prevailed, what changes are contemplated, what demands are made by labor for control of the industry, what is the effect of labor interference upon production, what the hours of labor and what the effect of these hours upon labor efficiency and upon human welfare. These are a few of the concrete questions which present themselves to the honest and inquiring mind. But how are such things to be known? One looks about for information and is confronted by a maze of contradictory assertion. The atmosphere is thick with propaganda. It requires skill to pick one's way through this tangle of contention, to evaluate the various assertions and to arrive at a fair estimate of the truth in the case. To do this requires considerable practice; practice under guidance. I should say then that a feature of our program will be an arrangement by which students may, in connection with their studies of concrete problems, investigate the more common organs of opinion, particularly the papers and

magazines. They should know the characteristic attitudes of these organs, the ownership, degree of professional pride in dispassionate and objective information which is manifested, class bias and kind of news given. They should know not merely that much of our so-called news needs to be taken with a grain of salt, but should also know how and where it is to be applied. A not unimportant part of political education is a training in the use of salt. One has not taken the first toddling steps toward civic competence if he does not understand the subtle propagandism of the *American Magazine* or if he attaches the same significance to an anti-labor statement found in the *Review of Reviews* that he would attach to a similar thing in the *New Republic*.

An illustration of a possible way of undertaking this sort of training is afforded by the work of a Labor Problems class just getting under way in our school. By the end of the semester each student undertakes to be familiar with the labor policy of each of our common magazines, over a dozen in number. The idea is that they shall not merely know that the *New Republic*, for instance, is in general pro-labor, but that they shall specify as many as possible of the points in the *New Republic's* labor program. The same thing applies to the other journals. The students who get in the way of reading our current periodicals understandingly may be expected, in many cases, to continue the habit after graduation from college.

Now the study of current political and social literature is not an adequate equipment for the gathering of social and economic data. In the case of the labor crisis which we have supposed, valuable material could be found in the permanent writings on the subject; in the books in the economic field, in the investigations that have been carried on. Hence courses in the social sciences containing as they do foundational matter should by no means be omitted. Especially is this true of Economics, Sociology and Political Science. I leave History out not by accident but by design. History I conceive to be not a subject for study but a method of study. History of course we must have. We must study problems, situations, institutions, historically as well as by observation, but the chronological study of history has no place as a method of civic instruction. If one wishes to understand the Ku Klux Klan he will find himself going back to a consideration of other times when like popular movements have arisen. He will learn much of the spread of suspicion and of violent outbreaks in consequence through his study of past phenomena. He can not think of omitting the witchcraft delusion of Salem. But one who gives a scant consideration to Roger Williams and the Salem delusion and the settlement of Georgia and the Stamp Act and the War of 1812 and the Tariff of Abominations is not gaining competence in the analysis of any particular problem. He is not in the field of political training at all. He is merely getting acquainted with the scenery amidst which he will operate as his studies proceed.

I have said that one needs also to be able to think clearly on political questions. The ability to do this really depends, however, in most cases upon one's success in the gathering of data. One cannot think clearly without knowing the facts of a situation, and clear thinking consists in very large part upon the selection and understanding of such facts. Take, for instance, a concrete case. Suppose that there is a controversy on with respect to an increase or a decrease in the wages of labor in a particular industry. Such contests we are observing almost every day. Now how is the citizen to think clearly and somewhat expertly on this question? Clearly, he will need to know first whether or not wages

have been going up recently or whether they have been going down. He will need to know something of the standard of living of the people in question. It is customary to undertake to form an opinion and actually to become opinionated on such questions without this preliminary work of knowing what the facts are. It was actually believed a year or so ago that labor and laborers in general were getting an enormous wage. It was commonly thought that they were lolling in luxury. The most outlandish stories of extravagant expenditures by working people were circulated and it was very generally assumed that such over-payment and heavy expenditure was usual in the labor world. At this same time a commission headed by Royal Meeker of the Bureau of Labor Statistics found upon an extensive investigation that the average modal income of workers in the United States was about $1,350 for families and at the same time, prices being what they were, families with an income of $1,800 were able to live in our American cities in physical comfort. How could people think clearly if they did not know this fact? Take a number of our attitudes toward problems which present themselves, the fears which sweep over the country, the devils which we are constantly creating, for instance, Bolshevists and the Reds. There are many people who go wild at the name and talk like persons who are insane. They look for revolution every May day and when the revolutions do not occur they assume that it was because of the super-vigilance of the Department of Justice. There is another element of our population which lives in terror of Catholics. There are many good people in this State who believe that guns are stored under every Catholic church and that each Knight of Columbus has taken an oath to kill a Mason. Almost the entire population believed a while ago that the Germans were a set of demons. They accepted all sorts of stories of atrocities and looked behind every corner for evidences of pro-German plotting. There are large numbers of Socialists who attribute the most crafty designs for the enslaving of the people to employers generally. Now as people learn how to evaluate the organs and agencies by which supposed fact is disseminated and opinion is built up and as they by them come into possession of a larger measure of truth they will be uninfluenced by such false notions.

There remains something more to do, however, than merely to be able to gather data. One needs to make a fundamental study of the facts of human nature, especially of the manifestations of this human nature in political society. His power to think definitely and clearly is enlarged by an acquaintance with such penetrating studies as those of Graham Wallas in the field of social psychology and of political activity. One is greatly aided in handling his materials and in coming to conclusions from their use by the study of such a book as E. A. Ross' "Principles of Sociology." One gets in such studies a description of typical forms of behavior which occur in our associated life. He gains a certain sophistication in his observations of the activity of his fellow men whether such activity be that of a social, political, industrial or religious organization.

Then there is the problem of giving effective expression to the opinions which one has formed. It is rather commonly assumed that the ballot box is the most important agency for the expression of opinion. It is certainly important that we possess the right to vote. If we did not possess the franchise little attention would be paid by the powers that be to our opinions. But the actual casting of ballots is not ordinarily a very significant activity. It is not a very important way of voting. We really vote effectively when we express opinions. When one delivers himself of a

judgment with respect to a public question he is helping to create conversation along that line. If a good many citizens engage in similar conversation and point their observations toward the same end there is developing a community opinion on the subject. Now our statesmen at Washington and at the state capitals, whatever else may be their merits or demerits, have at least gained a considerable facility in discovering the nature and content of this opinion. Their ears are constantly to the ground and they do know what the grass roots are saying. We very frequently hear it said that our legislators do not give effect to the wishes of the people by which we generally mean that the wishes of the people are not in keeping with our desires. I think it would rarely happen that a legislature or a congress would refuse to enact legislation if it were being discussed favorably throughout the land, if people were talking for it upon the street corners, if there were really an upward surge of opinion among the masses in favor of the thing; for whatever our office holders may or may not wish they do in general wish to retain their offices. Not only does the citizen vote on questions when they arise by expressing his opinion but he may take advantage of a system of plural voting. If his opinions are definite and clear cut and understanding his voice will carry considerable weight and will go far toward establishing the tone of the discussion in his community. So few people are really informed on public questions that one who knows what he is talking about may exert a greater influence in the development of opinion than do a dozen of his neighbors, and this opinion, once it is definitely established and asserted in the community, passes over into legislative action by a process so smooth as to appear almost automatic. Our great difficulty in government is not in the translation of definite opinion into action, but in the establishment of clear cut and definite opinion.

Furthermore, it is true that one seldom has the opportunity at the polls of expressing an opinion on any vital issue. We did not decide at the polls whether or not we would enter the war. No one ever expressed an opinion at the polls concerning the way the army should be raised or the way the war should be financed, that the railroads should be taken over by the government, that they should be turned back, that immigration should be restricted or that a ship subsidy should or should not be granted. We keep the right to go to the ballot box as a weapon to use on occasion and to give effect to the everyday expression of our opinion, but it is by the latter means that we most emphatically exercise the functions of citizenship.

I should say then that a program for political training in a college should be built around the social science studies now found in the curriculum. The courses here should be thought of primarily as instrumentalities for the enlarging of the understanding with respect to concrete issues as they present themselves. In the center of the student's attention must be the problems with which he is to wrestle as a citizen. The courses ought to be devised for the better wrestling with those problems. Our studies in psychology, in social psychology, in sociology, in economics and in political science ought to be made in the process of the analysis of current issues. This could easily be done by way of an examination of the concrete and definite manifestation of the labor problems of which we have spoken. One could in such a connection study all the social psychology there is to learn and could make it contribute toward the understanding of the problem with which he as a citizen is dealing. As a means to the understanding of these problems in the furtherance of his present activity as a citizen the student

should be encouraged to become familiar with the organs and agencies of opinion. In short, he should gain a thorough sophistication in this field so that he may not easily be duped. This freedom from being duped is, after all, according to Matthew Arnold, the primary function of college training.

WALTER E. MYER

KANSAS STATE NORMAL SCHOOL,
EMPORIA, KANSAS

EDUCATIONAL EVENTS

GOVERNOR SMITH OF NEW YORK ON EDUCATION

IN his message to the Legislature on January 3, Governor Alfred E. Smith spoke as follows relative to public education:

It would be idle for me to waste time emphasizing the necessity for maintaining our educational institutions at the very highest possible standard. Education is the one thing in the government that must always be one hundred per cent. We may fall down in our programs for public betterment or public improvements, but time lost in the development of education can never be made up. We must zealously labor that the state may give to her children the best possible education known.

Every proposal that strengthens this activity of the government should have your most careful consideration. The state should continue its policy of liberal appropriations to localities so that the salaries of the school teachers may be maintained at a figure commensurate with the great work that they are doing for the state.

The fundamental law of the state places upon the legislature the duty of providing a system of free common schools for all the children of the state, but we must go further and make provision for adequate night schools and for vocational training.

I would suggest that the committee on education of both the Senate and the Assembly have an immediate conference with the superintendent of education and the regents of the university looking toward more adequate school facilities in our rural communities. I am satisfied that the children in these sections of the state are not getting from the state the same opportunities for education that are accorded to the children in the cities. We owe it to all children alike and we should try to give it.

It might well be said that the inadequate school facilities now in farming communities present an additional reason why the people leave the farm and move to the cities. Every father and mother instinctively do their best to give their children all that the state affords in education. It is the safeguard of the state and of the nation. Anybody desiring to have a proper understanding of the necessity for an education need only talk to the man who was denied it.

I will be pleased to be called in by your committees at any time that you desire to take up these matters with the regents of the university.

Concerning the loyalty test law and the law providing for the licensing of private schools, the governor said:

I am firm in my belief that the law passed at the last session of the legislature which requires the teachers of our public schools to submit to a loyalty test is a direct violation of the letter and spirit of the laws of our state, unless you are prepared to take the stand that this great army of useful public servants is incapable of being responsible for the abuse of their rights. No reason that I can find justifies the existence of this law upon our statute books. It is wrong in principle. It is a violation of the spirit of our constitution and it is an unwarranted interference with freedom of opinion—one of the foundation stones of democratic government. Throughout the history of the world where people have allowed the government to think for them, the government has been unsuccessful. Part of the success of America lies in the undisputed fact that the government permits the people to think for themselves.

Equally vicious is the law, also passed at the last session, which provides for licensing and supervising private schools. While ostensibly for the purpose of safeguarding the institutions and traditions of our country, its real effect is to weaken them by abridging the fundamental right of the people to enjoy full liberty in the domain of idea and speech. We have now abundant law to check them when the law of the land is transgressed. Liberty and the pursuit of happiness can not be said to be safeguarded in a community that delegates to anybody the absolute power to prohibit the teaching of any subject of which they may disapprove.

Interference with personal liberty, censorship of thought, word, act or teaching, abridgment in any way of the freedom of speech and of the press by the government itself unquestionably encourages, if in fact it does not promote, intolerance and bigotry in the minds of the few

directed against the many. If we will obey that simple but important divine commandment, "Love thy neighbor as thyself," the state could have nothing but success—failure would be impossible.

I recommend to your earnest consideration the immediate repeal of the statutes spoken of in this section of my message.

THE VIRGINIA TEACHERS' PENSION SYSTEM

Arrangements have been made "for a complete and scientific survey" of the Virginia teachers' pension system by the Carnegie Foundation, according to the Virginia *Journal of Education*. The present Virginia system has been in operation for fourteen years. The state has made an annual appropriation to the maintenance of the system to the extent of $5,000; but the teachers themselves contribute the larger amount to the fund by an arrangement by which the school officials deduct one per cent. from their salaries. The *Journal* says editorially:

It will be admitted generally that the present plan needs revision, but let us not abolish it. We have made a good start. The best and most hopeful thing about it is the fact that the state has committed itself to the idea in making a small appropriation toward its maintenance. This should be increased and there is no doubt that it will be in time. There are strong arguments now for an increase in the state's appropriation, among which is the fact that the teachers themselves have shown a willingness to contribute out of their small earnings in order that a system might get started. It should be remembered that one of the fundamental principles of all insurance and indemnity risk is that the beneficiary contribute to the accumulation of the fund which makes it possible to pay the amounts accruing under the plan.

TRADE UNION COLLEGES

The American Federation of Labor and the Workers' Education Bureau of America agreed recently upon a program of adult workers' education. Such subjects as history, economics, government, labor law and public speaking will be taught in labor temples, public schools, public libraries, etc., throughout the country by high school and college instructors. The plan includes a workers' "five-foot shelf." The Workers' Education Bureau is preparing a series of text-books to be sold in paper covers at a price within the means of all working men and women. According to the prospectus, "the books will not seek to indicate short cuts to material success. The reasons which will finally determine the selection of the titles will be because they enrich life, illuminate human experience and deepen man's understanding." The Workers' Education Bureau has issued a statement in which it said:

The enthusiasm with which this movement is being pushed by the labor movement suggests a real revival of learning. Competent observers have predicted that the movement will become a mighty influence in the future public policy of the nation. President Gompers, of the A. F. of L., has well said that the future of the labor movement is in education. We may now look forward not merely to an educated working class, but to a working class educated in a sense or manner which will influence all other forms of education.

A general appeal will be made to all members of labor unions in America to join under the leadership of the Workers' Education Bureau to establish trade union colleges and workers' study classes, with the purpose of enabling workers to better understand their relation to industry, labor and the community.

HARVARD AND THE NEGRO

The Harvard *Alumni Bulletin*, commenting editorially on the question of admitting negro students to freshman dormitories, said that "for Harvard to deny to colored men a privilege it accords to whites appears inevitably as a reversal of policy, if not as positive disloyalty to a principle for which the university has hitherto taken an open and unshaken stand." The *Bulletin* added:

The question, we assume, is not closed, for President Lowell has stated the existing practice with the reasons which led to its adoption rather than the basis for a permanent policy. Before the ultimate settlement by the faculty and the governing boards, which is to be anticipated in the ordinary course of university procedure, we expect further expression of alumni on this matter.

The Boston *Evening Transcript* has collected examples of undergraduate opinion on the exclusion of negroes. Some of the opinions are as follows:

I shouldn't think the negro would want to live in the freshman dormitories himself because it would put him in an uncomfortable position. But if any negro, understanding the condition, insists on living there he should not be discriminated against. The chief objection from the viewpoint of the average student is not that he would have to room under the same roof but that he would have to eat at the same table. There are many students, however, who, although not particularly anxious to sit down at table with the negro, had rather take the chance of having to do so once in a while than see the university carry out this discriminatory regulation.

I think that the ruling in regard to negroes in the freshman dormitories is a wise one. It is keeping the spark away from the dynamite. As long as freshmen are required to live in the dormitories it seems unfair to require them to live with an unassimilable element. I think that most negroes are grateful to the college for making an exception for them to the rule of compulsory residence. In one instance there was a colored man in the dormitories and this was the source of great friction. The talk that President Lowell has acted without authority is absurd. The rule has been established ever since the building of the dormitories.

It seems to me that the question is one for the president to decide and that the solution of this difficulty is his job. He has handled the situation and I think that he should be heartily supported in his position. Aside from this I have no definite ideas on the subject.

I agree wholeheartedly with what President Lowell has said and done. People criticizing the president's attitude are those not living under the conditions which they wish to force on us. Mr. Lowell has denied no educational equality. He has merely done what prominent real estate men in New York do without any one raising a voice. It is the livable application rather than the abstraction of justice that we should seek.

Negroes should not be allowed in the freshman dormitories. I am absolutely against it. I can understand the feeling of the University of Virginia when it refused to compete with us because of the presence of a negro on our team. Admission into the dormitories would cause a lot of hard feeling. I know that many other men feel the way I do about this.

I think that if a man is to be admitted into the university he should stand on an equal basis with all other men. It seems to me that President Lowell is wrong in this matter.

It seems to me that we have either got to fire the negro from college or else let him come into the dormitories. Taking him into the dormitories does not mean, as is sometimes said, taking him into one's family. The negro problem is on our hands and we have to face it. Either he must be educated up to our view or a caste system developed. It seems to me that it is a case of being afraid of getting in bad with the southern white man. Of course it is hard to understand the prejudice of the south against the negro, as it is hard to understand the prejudice of the Californian against the Japanese. The negroes whom I have met at the university seem to me to be fine men. I have no sympathy with the attitude taken at Annapolis against there being a negro on one of our teams.

THE ANNUAL REPORT OF BARROWS OF THE UNIVERSITY OF CALIFORNIA

FORTY thousand and fifty-four persons received instruction from the University of California during the year 1921-22, says David P. Barrows, president of the university, in his annual report presented to the governor and members of the Legislature at Sacramento. The university has maintained its lead as the largest university in the United States with a total of 11,505 regular students, a grand total of 17,909 students, and 22,145 students registered in university extension courses. Figures compiled by the Recorder show that within the last eighteen years (1904-1923) the number of undergraduates in the departments at Berkeley has increased 317 per cent. and that the total number of resident students in the university in all branches (with all duplications deducted) is 421 per cent. The most marked growth has been in the graduate division at Berkeley, closely approximated, however, by the growth in undergraduate students at Berkeley over the full period.

With this fourfold increase in the number of students, the number of full time teachers has increased less than threefold and "the number of part-time or occasional officers of instruction (quite without any attempt to reduce this number to the basis of full-time service) has increased at a rate which still lags behind the increase in number of students.

President Barrows states that the resources of the university during the biennium 1921-23 have been fairly adequate and satisfactory. In the years preceding 1921 the university's growth outran its available income, but the appropria-

tions for the current biennium with the sums released from the incidental fees, suffice to secure a financial stability which may happily continue. "The university is free from recent embarrassments and all deficits have been recovered. Additions to teaching staffs have been made so that the demands of teaching are met fairly well. Academic compensation has been reorganized on a good standard. Additions of much needed and long delayed equipment have been made, though not completely. Instruction at the Southern Branch has been developed. The work of agriculture, including agricultural extension, has been much improved. As capital improvements, there are added two buildings for instruction on the Berkeley campus, and two on the campus at Davis. Removals and alterations of the wooden buildings housing the life sciences have much improved their usefulness. At the Southern Branch, alterations have added additional room for perhaps one thousand students.

EDUCATIONAL NOTES AND NEWS

Dr. G. Stanley Hall, president emeritus of Clark University, will make the address at the Founders' Day celebration of the university on February 5.

Dr. W. C. Bagley, professor of education at Teachers College, Columbia University, spoke at the Pennsylvania State College on January 10. While at State College Dr. Bagley installed a chapter of Kappa Delta Pi, national educational fraternity.

Dr. Frank P. Graves, New York state commissioner of education, delivered an address on December 29 at the meeting of the Associated Academic Principals in Syracuse on "The junior high school as an educational movement."

Mrs. Grace C. Stanley, county superintendent of San Bernardino County, California, succeeds Dr. Margaret McNaught as state commissioner of elementary education.

Dr. F. C. Touton, lecturer in secondary education at the University of California, has been appointed associate professor of education at the University of Southern California.

Leave of absence from the University of Michigan for the second semester has been given to Professor Charles S. Berry, professor of educational psychology.

Dean Philo M. Buck, of the College of Arts and Sciences of the University of Nebraska, has been granted an extension of his leave of absence until September, 1923. The extension was granted at the request of the government of India, in which country Dean Buck is now traveling in an exchange professorship with Professor S. L. Joshi, of Boroda College.

In announcing the retirement of President Henry Pratt Judson, of the University of Chicago, previously noted in these columns, the University of Chicago *News Letter* states that Dr. Judson intends to "devote his time to completing investigations and to preparing certain publications which it has been impracticable to carry on under the pressure of administration responsibilities." Dr. Judson also retires as professor and head of the department of political science.

A memorial fund has been established at Brown University in honor of Dr. John Howard Appleton, professor emeritus of chemistry. The fund will be used to provide special annual lectures at Brown in pure or applied chemistry.

William Mayo Newhall, of San Francisco, and Herbert Hoover, whose home is on the Stanford campus, have been reelected members of the Board of Trustees of Stanford University to succeed themselves at the expiration of their terms of office. The Stanford trustees are elected for ten year terms and each of these men joined the board in 1912.

Mr. Harvey E. Conard, formerly of the Columbus High School of Commerce, is the new assistant managing editor of *The Ohio Teacher*.

Derby Academy, Hingham, Mass., has a board of advisers to assist John R. P. French, the new headmaster. The board includes William L. W. Field, headmaster, Milton Academy; Henry W. Holmes, dean of the Graduate School of Education, Harvard University, and Eugene R. Smith, headmaster of the Beaver School, Chestnut Hill.

The American Bankers' Association has sent an invitation to Dean Russell, of Wisconsin, Dean Dobson, of Louisiana, and Dean Jardine,

of the Kansas State Agricultural College, to become members of the advisory council of its agricultural commission. The plan was inaugurated by the bankers association in an effort to come into closer touch with the farmer.

THE new officers of the Association of Colleges and Secondary Schools of the Southern States, elected at the New Orleans meeting in December, are as follows: *President*, S. J. McCallie, McCallie School, Chattanooga; *secretary*, E. D. Pusey, superintendent of Durham City Schools; *executive committee*, J. H. Kirkland, Vanderbilt University; L. T. Baker, University of South Carolina; W. D. Hooper, University of Georgia; W. W. Guth, Goucher College; A. B. Dinwiddie, Tulane University.

PROFESSOR EMERITUS G. H. PALMER, of Harvard University, will lecture at the university on Homer on February 14, inaugurating a series on Homer, Dante, Virgil and Milton. The other lecturers will be Professors E. K. Rand, C. H. Grandgent and J. L. Lowes.

DR. ANDREW W. EDSON, recently retired as associate superintendent of New York city schools, will deliver a series of lectures on "The school principal" during the second half year in the Boston University School of Education.

DR. SAMUEL A. ELIOT, of Cambridge, Mass., president of the American Unitarian Association and member of the United States Board of Indian Commissioners, delivered the annual Founders' Day address on January 28 at Hampton Institute.

DR. FREDERICK W. ROMAN, special collaborator of the United States Bureau of Education, has returned after spending several years in a study of educational conditions in Europe. Dr. Roman will give two series of lectures at the New York University Summer School, July 2 to August 10, on "European school systems" and "Changes in European education since the great war."

PROFESSOR ANDRE MORIZE, of Harvard University, was the guest of Cornell University on January 25, when he gave an address on "L'humour et l'esprit."

HENRY SEIDEL CANBY, literary editor of the New York *Evening Post* and former professor at Yale, will lecture on "Literary criticism," and Professor James Harvey Robinson, of Columbia University, will lecture on "Humanizing history" in the Marshall Woods series at Brown University in March and April, respectively.

ELIZABETH A. WOODWARD, supervisor of work with immigrant women in New York State, is to give a course of lectures on "Methods of work with immigrant women" at Hunter College, New York City, beginning this month.

THE annual meeting of the Headmasters' Association of the Philadelphia district was held at the Adelphia Hotel, Philadelphia, on January 20, with President William Mann Irvine, of Mercersburg Academy, in the chair. The program consisted of a discussion of four topics, as follows: "Duties of a board of trustees," led by Arthur E. Brown, Harrisburg Academy, Harrisburg, Pa.; "Teachers contracts and perquisites," led by George A. Walton, George School, Pa.; "Arousing students to study," led by Dr. L. Wardlaw Miles, Gilman Country School, Roland Park, Md.; "Best means of discipline," led by E. M. Hartman, Franklin and Marshall Academy, Lancaster, Pa. Dr. Roger W. Swetland, of Peddie Institute, Hightstown, N. J., was elected president, and Jesse E. Philips, of St. Luke's School, Wayne, Pa., was elected secretary-treasurer of the association for 1923.

THE Michigan State Normal College at Ypsilanti held its fifth mid-year educational conference on January 19 and 20. The two morning sessions were devoted to general programs. In the one afternoon session the conference met in eight sections. Speakers from out of the state were: Professor Patty S. Hill, Professor Cora Winchell and Dr. Raleigh Schorling of Teachers College, Columbia University; Professor J. L. Meriam of the University of Missouri; Mr. William M. Lewis of the National Board of Commerce, Washington, D. C.

DR. PAUL S. REINSCH, counsellor to the Chinese government, died at Shanghai on January 26, following a protracted illness. He was in his fifty-third year. From 1899 to 1913 he was in the department of political science in the University of Wisconsin, serving as assistant professor and then

professor. Dr. Reinsch was Roosevelt professor at the Universities of Berlin and Leipzig in 1911-12, and was a member of the faculty of the University of Chile. He gave up his professorship at Wisconsin in 1913 to become United States minister to China. When he resigned in 1919 prominent Chinese gave him a remarkable demonstration of admiration and in 1920 he was appointed counsellor to the Chinese government.

THE Lafayette College Board of Trustees has voted to accept a gift from Harry S. Gay, of Baltimore, Md., of securities with a market value of $11,000 to establish "The Joseph Johnson Hardy Memorial Fund," as a tribute to the services of the late Professor Hardy, for forty-five years teacher of mathematics at Lafayette. The income of the fund is to be divided at each commencement equally among the five members of the faculty oldest in point of continuous service. It is expressly provided that the income from the fund shall not be treated by the trustees as in lieu of salary or pension, it being the hope of the donor that the money so received shall make it possible for the professors to travel and to enjoy other privileges which they could not ordinarily afford, and which may prove a source of stimulation and invigoration in their teaching.

SUBSCRIPTIONS to the Harvard endowment fund reached a total of $13,892,605.29 on January 1, according to figures now made public. Of the sum, $10,910,825.31 had actually been paid in on that date, against a corresponding figure a year earlier of $9,776,706.89.

THE Pennsylvania State College emergency building fund campaign has reached the halfway mark of one million dollars. About one third of the alumni have subscribed thus far. A check for $21,349 was recently received for the fund from the alumni athletic advisory committee, representing Penn State's net proceeds of the foot-ball game played in California on New Year's Day.

FRANKLIN AND MARSHALL COLLEGE has received contributions from alumni and friends in its present campaign totalling $108,000, thus qualifying for a $100,000 contingent gift from the General Education Board. President H. F. Apple announces that dormitories to cost about $300,000 have been authorized by the board of trustees of the college.

PRESIDENT LEMUEL H. MURLIN, of Boston University, stated in his annual report to the trustees recently that, to meet present needs, the university "ought to have $4,500,000." The total pledged for the year up to June 30 last was $1,500,036, including a conditional gift of $400,000 from the General Educational Board.

ADRIAN COLLEGE, a Methodist Protestant institution now situated at Adrian, Michigan, will shortly move to Steubenville, Ohio, as a result of action recently taken by the Pittsburgh conference of the church. The city of Steubenville offered $300,000 as an inducement to bring the college to Steubenville.

THE building plans of the Boston School Committee, soon to be laid before the Massachusetts Legislature, call for $1,500,000 as the minimum for improved accommodations for the Mechanic Arts High School, the Boston Trade School, the Trade School for Girls and the Continuation Schools.

THE New York State Board of Regents has approved a bill prepared by the committee of twenty-one, which conducted the recent rural school survey, designed to improve conditions in the country districts. This measure provides for the consolidation of rural school districts on a community basis and increased state aid.

THE Bureau of Educational Research of the College of Education, University of Illinois, has published a bulletin by Director Walter S. Monroe on "Written examinations and their improvement."

SCIENTIFIC research to improve instruction is the aim of the High-School Research Council of Los Angeles, which has attracted two hundred educators of the city, including junior and senior high-school principals and teachers, as well as psychologists and other persons interested in educational research. The council meets twice a month for scientific discussion of educational problems.

THE Bureau of Vocational Guidance of Harvard University has taken over the publication of the National Vocational Guidance Association *Bulletin*, and the January number has appeared under the new direction.

THE Bureau of Education recently issued a bulletin entitled "A Kindergarten-First Grade Curriculum." The ten chapters which it contains deal with the several aspects of first grade work on the supposition that the children have had such a basis for their work as that given in the "Kindergarten Curriculum" published by the bureau in 1919. The bulletin was compiled by a committee of the International Kindergarten Union with the cooperation of a group of specialists in primary education.

DISCUSSION

LATIN IN THE HIGH SCHOOL

THE classical investigation is now in full swing. The first-fruits of its testing program have ripened,[1] and we now know certain facts concerning the mental make-up of the Latin pupils in the ninth grade in over one hundred high schools. Some of the facts cry aloud for comment.

(1) The results of the Reading Test showed that in some schools boys and girls are allowed to begin Latin when their ability to read and understand the English language is less than that of the average child of nine years. This practice might have been defended a generation ago in English schools of the old classical tradition where Latin was the staple food for all the boys alike, and was begun at the tender age of seven. It is almost incredible that such students should be to-day learning Latin in the freshman grade of the high school, in the same class with the bright boy or girl whose reading ability is of adult standard. Lack of reading ability is probably a greater handicap for learning Latin than for any other high-school subject, with the exception of English. In spite of recent efforts to simplify the Latin course, the fact remains that most teachers expect their pupils to grapple with Cæsar and his complicated sentence-construction at the beginning of the second year; moreover, though the "adapted" Latin which is usually read in the first year is fairly simple, the grammatical explanations met with in beginners' books make considerable demands upon reading ability. If the teacher is spending time explaining the meaning of the English "explanations" to the weakest students, he must of necessity be neglecting the real business of the Latin class.

(2) The Grammar Test revealed a still worse state of affairs. Actually twenty-two per cent. of all the Latin pupils who took the test had almost no knowledge of the fundamentals of grammar before they began their study of Latin. Conscientious teachers must be forced to devote several weeks to making up the deficiencies of these pupils, hence wasting the time of those who have been better prepared. This must be taken into account in any discussion of the amount which can be covered in the first year of Latin.

(3) Test of general intelligence gave results of the same kind. Sitting side by side in the same Latin classes are students whose mental ages range from ten to seventeen years.

It is clear, then, that the Latin teacher has an almost superhuman task before him. His pupils do not form a homogeneous group of good ability, ready to advance together along the well-worn *via Latina;* some are equipped for a rapid advance and will successfully surmount every difficulty; others can only crawl, and some of them will almost surely fall by the way. No matter how good the text-book and how skilful the teaching, these pupils can not be taught the same amount of Latin at the same rate. The attempt to do so discourages the weak ones greatly, hinders the progress of the best, makes the subject distasteful, and may even create in the school system an atmosphere of intellectual dishonesty.

Large schools are already experimenting with various ways of grading according to ability; with alternative schemes of study; and so forth. In very small schools, individual work can be arranged for each member of the class. It is in the average-sized high school that the problem is most difficult to tackle, and where its solution depends mainly on skilful experimentation by the Latin teachers on handling two sections in one room, or on some modification of the Dalton plan.

A great deal of experiment is also needed with regard to the curriculum. Latin is one of the most unpopular of subjects, and no won-

[1] "A Comparison of the Latin and Non-Latin Groups in High School," *Teachers College Record*, Columbia University, New York City, November, 1922.

der. All but exceptionally gifted students are likely to be put off by the deadening effect of nothing but grammar, Cæsar and Cicero for perhaps one fifth of their school time for three whole years—the very best years, in the opinion of many educationalists. For whom was this mental pabulum devised? It starves the gifted, chokes the normal and kills off the weak. No wonder few of the survivors are strong enough to enter the enchanted ground of Vergil. There is far more variety and choice allowed to both teacher and pupil in English secondary schools, and much experimental work on the part of the teachers is made possible by the varied devices for grading and regrading the pupils according to proficiency in each subject. Advantage might be taken in the states of the results of this work.

The classical investigation is now engaged in measuring the amount of improvement in English due to the study of Latin. It will do well to remember that its findings will only show the result of the study of Latin under the present conditions of class teaching, with the present curriculum and the present teachers. They can in no degree either condemn or justify the study of Latin in general. It is to be hoped that the amount of improvement shown in each class will be interpreted in the light of facts concerning the methods of teaching, the size and homogeneity of the class, the text-books used, the qualifications and personality of the Latin teacher. This would make the investigation a most valuable contribution to the science of education.

Labor in the cause of a classical education for those who can profit by it is particularly worth while now in its time of need. Barrie gave it his sanction the other day at the University of St. Andrews: "I am far from taking a side against the classics. I should as soon argue against your having tops to your heads: *that way lie the best tops.*"

EDITH I. NEWCOMB
ST. IVES, EAST GRINSTEAD,
ENGLAND

COMMERCIALIZED ATHLETICS

TO THE EDITOR OF SCHOOL AND SOCIETY:

The University of West Virginia foot-ball team (the name of which indicates that there may be an educational institution by that name) played an alleged game of foot-ball in San Diego on Christmas Day. Their opponents were an obscure team from Spokane "doped up" for the occasion to be one of the best on the Pacific Coast, although having no conference standing.

The Gonzaga team arrived two or three days before the match, the West Virginia team a day or so later. These so-called "amateurs" traveling under the names of educational institutions were openly placed in most familiar contact with agencies and organizations viewed askance even by professional teams. No one can believe for a moment that National League teams or umpires would dare to associate in playing season with notorious gambling interests or that they would dare to use the names of their organizations in such connection at any time. Has college athletics already fallen so low that open association with the lowest elements in professional sport goes without comment? If these men really represented their colleges (as educational institutions) why were they not mentioned in connection with the local University Club or Y. M. C. A. or some organization that at least has a name of respectability? The fact that that suggestion sounds ridiculous shows that college athletics has strayed far from amateurism and from true sympathy with educational ideals.

Christmas Day was warm, so warm as to be uncomfortable in the sun on the golf course which I was using at the time of the game. West Virginia won by a safe margin (according to "dope") although the newspapers reported it to be a wonderful game and a very close contest. Note that both teams had traveled for two or more days, that they came into debilitating climatic conditions, that they had been doing more or less perfunctory training after a full season and that the whole affair was in the nature of a holiday exhibition. In spite of the beautiful day the attendance was not satisfactory to the promoters and there was very caustic comment in the local press about the failure to support the enterprise. (It sounds like the perennial whine of the sporting crowd at many of our colleges, doesn't it?) This in spite of the fact that no arguments have been presented which showed any

real benefit to our people from such an exhibition.

Three eastern teams are making the trip to California this year for post-season games. There is no excuse in amateur sport (sport for sport's sake) for one. Not one of them confers any benefit on its college by coming. Every one helps strengthen the strangling grip of commercialism upon college athletics and college life. Every eastern or western college which affiliates with such teams or which countenances such practices or which allows its policies to be swayed by gate receipts or other returns is guilty of commercialization in some degree. Where is there a college which is free?

W. E. ALLEN

LA JOLLA, CALIFORNIA

QUOTATION

THE ADMINISTRATION OF THE PENNSYLVANIA SCHOOLS

AMONG nearly thirty definite, substantial achievements of the Sproul administration, four are to be rated as of outstanding importance. These are reorganization of the public school system; development of the good roads program; creation of the department of public welfare, and establishment of a permanent policy of forest conservation. Any one of these accomplishments would be enough to give high repute to an administration.

Because of the number of persons affected and the drastic nature of the changes introduced, the reorganization of the department of public education takes first place. Although the leading industrial state in the union, the second in population and the seventh in agriculture, and representing one tenth of the nation's wealth, Pennsylvania was long a laggard in the matter of public schools and higher institutions of learning. The other states of the middle Atlantic group, New England and the progressive middle west have all maintained public school systems superior to ours; Pennsylvania in this respect has been a contender with the backward states of the south and the sparsely settled regions of the southwest, ranking twenty-first in its educational standards and equipment.

Yet within a single gubernatorial term legislation was drafted and enacted and put into effect which accomplished thorough reorganization, and to-day the commonwealth holds a foremost place in this vitally important field. Effective enforcement of the compulsory attendance laws has increased the average attendance ten per cent. in two years. Through lengthening of the term and the replacing of 1,700 one-room schools by 200 modern consolidated schools, vastly broader educational opportunities have been provided for the boys and girls of rural districts. The junior high schools have increased by forty-five per cent. in four years the number of pupils completing high school work. There are more than one hundred of these schools, with an enrollment of 60,000. In vocational education the state leads, and the entire school curriculum, revised and expanded, has become a standard for many states.

Far more important than the advance in equipment, however, has been the improvement in the teaching personnel, raising of the salary schedules to a decent level having stopped the exodus of efficient teachers and made the profession attractive to cultured men and women. The resulting increase in interest and enthusiasm is shown by the fact that last year 13,000 teachers enrolled in extension classes, and more than 25,000 devoted their vacations to study in summer schools.

It took foresight and courage on the part of the executive and the legislature to increase the school appropriations for two years to $32,000,000. These qualities were exhibited, too, when the administration ignored the protests of politicians and reached out to another state for a man to reorganize and direct the system.

Thousands of district boards, made up of men and women who had given their best efforts to the local schools, not unnaturally felt aggrieved at being shorn of some of their powers. In the recent political campaign enemies of the administration tried to capitalize this resentment, and made organized attacks upon Dr. Finegan, the state superintendent, on the score of "extravagance." These charges have been effectively refuted through a survey made by the King commission, a body which was fairminded but in no sense partial to the administration; it reported that there had been no undue extravagance, and highly commended the new system. —*Philadelphia North American.*

DOCTORATES CONFERRED IN THE ARTS AND THE SCIENCES BY AMERICAN UNIVERSITIES 1921-1922

(Continued from the issue of January 27)

History

BRYN MAWR: Vera Lee Brown, "Anglo-Spanish relations in America in the closing years of the Colonial Era, 1763 to 1774."

CATHOLIC: Patrick William Browne, "Beginnings of the Catholic church in the United States." Emmett Hannick, "Reginald Pecock." Edward John Hickey, "Society for the propagation of the faith." John Hugh O'Donnell, "Catholic hierarchy of the United States, 1790 to 1922." Boniface Stratemeier, "Thomas Cornwaleys."

CHICAGO: Wesley Marsh Gewehr, "Great awakening in Virginia." Joseph Lyman Kingsbury, "Early history of Colorado." Albert Burton Moore, "Conscription in the Confederacy." Louis Martin Sears, "Jefferson and the embargo."

CLARK: Frederick Morse Cutler, "History of military conscription with especial reference to the United States."

COLUMBIA: Encarnacion Alzona, "Some French contemporary opinions of the Russian Revolution of 1905." Leonard Axel Lawson, "Relation of the British policy to the declaration of the Monroe Doctrine." Shi Yung Lu, "Political theories of P. J. Proudhon." Henry R. Mueller, "Whig party in Pennsylvania." Gyoju Odate, "Japan's financial relations with the United States." Elizabeth Denny Pierce, "Roman man of letters, Gaius Asinius Pollio." Cesidio Ruel Simboli, "Disease—spirits and divine cures among the Greeks and Romans."

CORNELL: George Gordon Andrews, "Mounier and the constitution." Louis Gottschalk, "Political career and theories of Jean Paul Marat."

HARVARD: Thomas Perkins Abernethy, "Formative period in Alabama, 1815 to 1828." Daniel Huger Bacot, "Progress of South Carolina during the Confederation and Federalist periods (1783 to 1800)." William Gleason Bean, "Transformation of parties in Massachusetts." Stillman Percy Roberts Chadwick, "Conditions of Roman colonization from Gaius Gracchus to the death of Augustus." Edward Everett Dale, "History of the ranch cattle industry in Oklahoma." Arthur Burr Darling, "Jacksonian democracy in Massachusetts." Telly Howard Koo, "Life of Anson Burlingame." Thomas Powderly Martin, "Influence of trade in cotton and wheat on Anglo-American relations from 1829 to 1846." Ashbel Sellew Roberts, "Opposition to conscription in the South from 1861 to 1865." Henry Merritt Wriston, "Executive agents in American foreign relations."

IOWA: Eric McKinley Ericksson, "Official newspaper organs and their activities, 1825 to 1837; a study in Jacksonian politics."

JOHNS HOPKINS: Charles Coleman Thack, "Creation of the presidency 1775 to 1789." Warren Reed West, "Contemporary French opinion on the American Civil War."

KANSAS: Elmer LeRoy Craik, "Southern interest in territorial Kansas, 1854 to 1858."

MICHIGAN: Eber Malcolm Carroll, "Opposition party in the North, 1828 to 1840." Albert Hymn, "'Devotio Moderna,' or Christian renaissance (1380 to 1520)." Henry Stephen Lucas, "Political relations of Brabant under Duke John III, 1312 to 1355."

MINNESOTA: Georgina Talbot Droitcoir, "English manorial group."

NEW YORK: Eli Edward Burris, "L. Annæus Seneca in Corsica."

PENNSYLVANIA: Amy Margaret Gilbert, "Work of Lord Brougham for education in England." Albert Tangemen Volwiler, "George Croghan and the westward movement, 1741 to 1772."

PRINCETON: William Columbus Hunter, "Commercial policy of New Jersey under the Confederation, 1783 to 1789."

RADCLIFFE: Hannah Grace Roach, "Sectionalism in American politics from the Reconstruction period to 1890."

WASHINGTON: Olive Kuntz, "Tiberius Cæsar and the Roman constitution."

WISCONSIN: Finla Goff Crawford, "Manufacturing in the United States, 1860 to 1870." Charles Henry Oldfather, "Greek literary papyri from Greco-Roman Egypt."

YALE: Clarence White Rife, "Vermont and Great Britain, 1779 to 1783."

Latin

CHICAGO: Harold Bennett, "Cinna and his times." Blanche Elizabeth Mae Brotherton, "Vocabulary of intrigue in Roman comedy." Frank Russell Hamblin, "Development of allegory in the classical pastoral."

JOHNS HOPKINS: Clayton Morris Hall, "Nicolaus of Damascus' Life of Augustus." Carol Van Buren Wight, "Caius Asinius Pollio."

MICHIGAN: Bruno Meinecke, "Tuberculosis in classical antiquity."

NEW YORK: Casper John Kraemer, "Satirists in Roman literature."

YALE: Shirley Smith, "Method of characterization in Cicero's Brutus."

Law

COLUMBIA: William Penn Cresson, "Holy Alliance." Alexander Oberlander Potter, "Canada as a political entity."

Mathematics

BRYN MAWR: Margaret Buchanan, "Systems of two linear integral equations with two parameters and symmetrisable kernels."

CALIFORNIA: Bing Chin Wong, "Study and classification of ruled quartic surfaces by means of a point-to-line transformation."

CHICAGO: Edward Hegeler Carus, "Invariants as products." Harry Scheidy Everett, "Determination of all general homogeneous polynomials expressible as determinants whose elements are homogeneous polynomials." Vishnu Dattatreya Gokhale, "Concerning compact Kürschak fields." Claribel Kendall, "Certain congruences determined by a given surface." Cyrus Colton MacDuffee, "Invariantive characterizations of linear algebras with the associative law not assumed." Edgar D. Meacham, "Properties of surfaces whose osculating ruled surfaces belong to linear complexes." John Sidney Turner, "Fundamental system of formal invariants of a modular group of transformations." Ernest Bloomfield Zeisler, "Definite integral representation of invariants."

COLUMBIA: Eugenie Maria Morenus, "Geometric properties completely characterizing the set of all the curves of constant pressure in a field of force."

HARVARD: Clarence Raymond Adams, "General theory of the linear partial q-difference equation and of the linear partial difference equation of the intermediate type." Bancroft Huntington Brown, "Equilong transformations of Euclidean space." Rudolph Ernest Langer, "Developments associated with a boundary problem not linear in the parameter. II. The boundary problems and developments associated with a system of linear differential equations of the first order."

ILLINOIS: Harvey Pierson Pettit, "General cyclide with special reference to the quintic cyclide." William Phillip Udinski, "Series of rational functions formally analogous to Fourier's series."

PENNSYLVANIA: Anna Margaret Mullikin, "Certain theorems relating to plane connected point sets."

RADCLIFFE: Eleanor Pairman, "Expansion theorems for solution of a Fredholm's linear homogeneous integral equation of the second kind with kernel of special non-symmetric type."

WISCONSIN: William Emanuel Cederberg, "Motion of a double pendulum."

Metallurgy

PITTSBURGH: Yuan Chen Chao, "Non-metallic inclusions in iron and steel."

Meteorology

CORNELL: Richard Alan Mordoff, "Climate of New York State and its relation to agriculture."

GEORGE WASHINGTON: Clarence Leroy Meisinger, "Preparation and signification of free-air pressure maps for the eastern United States."

Oriental

CHICAGO: William Franklin Edgerton, "Ancient Egyptian ships and shipping."

JOHNS HOPKINS: Lily Dexter Greene, "Indic flora in Sanskrit lyric poetry and drama."

PENNSYLVANIA: Ernest Paxton Janvier, "Madhyama Vyāyoga." Martin Jacob Wyngarden, "Syriac text of Daniel."

YALE: John Clark Archer, "Mystical element in the life of Mohammed." Pinkhos Churgin, "Aspects of Targum Jonathan to Prophetæ Posteriores." Hirsh Leib Gordon, "Treatment of divine finitude, mobility and anthropomorphism in the targum of pseudo-Jonathan to the Pentateuch."

Paleontology

CHICAGO: Vivian Ouray Tansey, "Paleontological study of the Helderberg and Oriskany formation of Ste. Genevieve County, Missouri."

Pathology

CHICAGO: Clark Owen Melick, "Preparation of bacterial antigens." Shinzo Motohashi, "Fixed tissue phagocytosis."

CORNELL: Robert Lorenzo Webster, "Fumigation with hydrogen cyanide for the control of pear psylla." Freeman Weiss, "Conditions of infection in the potato wart disease."

GEORGE WASHINGTON: Ernest Frederick Mahr, "Critical consideration and performance of diagnostic reactions for syphilis, with special reference to a practical quantitative method for the complement fixation reaction in syphilis."

JOHNS HOPKINS: Frank Edward Coughlin, "Schick test in the negro." Hobart William Cromwell, "Hemolytic antibody-antigen combination." Ida Williams Pritchett, "Pathological effects of diphtheria toxin in the guinea pig, with special reference to a lesion of Bowman's capsule." Robert Hickman Riley, "Significance of renal carriers in the spread of typhoid fever, reports of epidemics and suggestions for the control of carriers." Charlotte Condict van Winkle, "Infant mortality in Baltimore."

MICHIGAN: George Rudolph Herrman, "Electrocardiography and cardiac pathology, with special reference to ventricular preponderance."

Watson Frank Walker, "Prevalence of disease in the city of Detroit."

MINNESOTA: Louise Dosdall, "Factors influencing the pathogenicity of *Helminthosporium sativum* Pammel, King and Bakke." Marshall Hertig, "Some phases of the pathological histology of the honey-bee, with special reference to infection with *Nosema apis*." Julian Gilbert Leach, "Parasitism of *Colletotrichum lindemuthianum*." Margaret Newton, "Wheat stem rust."

NEW YORK: Proviso V. Prewitt, "Rôle of the liver in lipolysis."

WASHINGTON UNIVERSITY: Harry Milliken Jennison, "Potato blackleg with special reference to the etiological agent." Harry Robert Rosen, "Bacterial disease of foxtail (*Chætochloa lutescens*)."

WISCONSIN: William Harold Davis, "Spore germination of *Ustilago striæformis* (Westd.) Niessl. in relation to the production of the leaf smut of grasses." George Francis Forster, "Precipitinogen and precipitin curves with especial reference to the later history of the precipitin curve." Leon Kilby Jones, "Raspberry anthracnose and its control in Wisconsin." Frank Theodore McFarland, "Genus *Claviceps*." Albert Joyce Riker, "Relations of the crown-gall organism to its host tissues." Wilmer Garfield Stover, "Relation of soil temperature to the development of certain fungus seedling blights of corn." George Frederick Weber, "Septoria diseases of cereals."

YALE: Elliott Stirling Andrew Robinson, "Antigenic relationships of the typhoid bacillus."

Philology

CATHOLIC: Leo Vincent Jacks: "St. Basil and Greek literature."

HARVARD: Claude Lee Finney, "Shakespeare and Keats." Bennett Moorhead Hollowell, "Beginnings of English literary criticism." John Hornicek, "Madame Cottin: a study of the pre-romantic novel in France." Chesley Martin Hutchings, "Sentiment of nationality in Spanish literary criticism from 1400 to 1621." John Richardson Miller, "Reputation of Boileau in France in the eighteenth century." Robert Henry Pfeiffer, "Royal and official correspondence under the Sargonid dynasty of Assyria (722 to 626 B.C.)." George Reuben Potter, "Idea of evolution in the English poets from 1744 to 1832." Thomas Middleton Raysor, "Critical theories of Byron, Shelley and Keats." Walter Silz, "Heinrich von Kleist's conception of the tragic." Willard Mallalieu Smith, "Nature of comedy." Paul Spencer Wood, "Neo-classicism in England from 1660 to 1700."

ILLINOIS: Mary Luella Trowbridge, "Philological studies in ancient glass."

PRINCETON: Ainsworth O'Brien-Moore, "Madness in ancient literature."

RADCLIFFE: Anna Irene Miller, "History of the experimental theatre in Europe, 1887 to 1918." Ruth Perkins, "Die lautlehre des Hans Sachs, wie sie in seinen handschriften erscheint."

Philosophy

BOSTON: Benjamin David Scott, "Problem of error in American new realism."

CATHOLIC: John Joseph Rolbiecki, "Political philosophy of Dante Alighieri."

CHICAGO: Mont Robertson Gabbert, "Theories of consciousness." Thomas Bernor Smith, "Philosophic bases of the American doctrine of equality."

CINCINNATI: Walter Scott McNutt, "Compatibility of the instrumental theory of knowledge with serious religious faith."

COLUMBIA: John Herman Randall, Jr., "Problem of social responsibility in American labor." Florence Webster, "Nature of life."

HARVARD: John William Miller, "Definition of the Thing." David Yule, "Theories of abstract implication."

IOWA: Herman Hausheer, "Diversity of historical streams due to the cross-currents in the thought and life of St. Augustine." Lewis Guy Rohrbaugh, "Energy concept: spiritual interpretation of reality."

NEW YORK: Henry Arthur Bentson, "Royceau absolute, with a special reference to its religious significance."

WISCONSIN: Vivian Trow Thayer, "Critique of the ethical philosophy of Benedict de Spinoza."

YALE: Carl Gustaf Erickson, "Meaning of consciousness." Cornelius Francis Krusé, "Analytical study of pessimism."

Physics

CALIFORNIA: Alvin Klintworth Astor, "Optical properties of molten metals." William Francis Giauque, "Test of the third law of thermodynamics by means of specific heat measurements on crystalline and supercooled liquid glycerine." Richard Hamer, "Limiting frequency of the photo-electric effect." Albert Morris Williams, "Heat capacities at high temperatures of certain electro-positive metals."

CHICAGO: James Milton Eglin, "Coefficients of viscosity and slip of carbon dioxide by the oil drop method and the law of motion of an oil drop in carbon dioxide, helium and oxygen at

low pressure.'' Marie Farnsworth, ''I and II. Chemical reactions in the corona. III. Protoactinium and the origin of the actinium series.'' Vern Oliver Knudsen, ''Sensitivity of the ear to small differences of intensity and frequency.'' Marshall Ney States, ''Coefficient of viscosity of helium and the coefficient of slip of helium and oxygen by the constant deflection method.'' William Ralph Smythe, ''Spectrum of fluorine.'' Lloyd William Taylor, ''Width of certain lines in the spectrum of helium as a function of pressure in the source.'' Karl Skillman Van Dyke, ''Determination of the coefficients of viscosity and of slip for carbon dioxide and air by the constant deflection method.'' Hugo Bernard Wahlin, ''Behavior of free electrons toward gas molecules.'' Thomas Russell Wilkins, ''Multiple valency in the ionization by alpha rays.''

CLARK: Mildred Allen, ''Thermal emissivity of water.'' Clarence Nichols Hickman, ''Alternating current resistance and inductance of single layer coils.''

COLUMBIA: Laura Brant, ''Magnetic susceptibility of nickel and cobalt chloride solutions.''

CORNELL: Joseph Adam Becker, ''Effect of the magnetic field on the absorption of X-rays.'' Leland Jaynes Boardman, ''Exciting power for fluorescence of the different parts of the ultra-violet spectrum.'' Leon Francis Curtiss, ''Effect of temperature on the change of resistance of bismuth films in a magnetic field.'' Charles Byron Jolliffe, ''Polarization capacity and resistance at radio frequencies.'' Herbert Kahler, ''Crystalline structures of sputtered and evaporated metallic films.'' Charles Moon, ''Photoelectric conductivity and photoelectric polarization in sulphur.'' James Owen Perrine, ''Spectrographic study of ultra violet fluorescence excited by X-rays.'' Kuo-Feng Sun, ''Method of the precise measurement of a capacity in series with a high resistance.''

HARVARD: Leo Isadore Dana, ''Latent heat of vaporization of liquid oxygen, nitrogen and mixtures.'' Lewis Madison Hull, ''Continuous oscillations maintained by an electron tube in a single periodic circuit.'' John Hasbrouck Van Vleck, ''Critical study of possible models of the normal helium atom.''

ILLINOIS: Claude Jerome Lapp, ''Effect of short electro-magnetic waves on a beam of cathode rays.'' Eleanor Frances Seiler, ''Color-sensitiveness of photo-electric cells.''

INDIANA: John Hoffer Cloud, ''Effect of conical horns on the intensity of sound as measured by a Rayleigh disc or a Webster phonometer.''

IOWA: John Chris Steinberg, ''Hall effect and specific resistance of evaporated films of silver, copper and iron.''

JOHNS HOPKINS: Frederick Sumner Brackett, ''Visible and infra-red radiation of hydrogen.'' William George Brombacher, ''Detecting efficiency of the resistance-capacity coupled amplifier to 6000 meters.''

MICHIGAN: Bethel Jay Babbitt, ''Effects of a longitudinal magnetic field on the mechanical properties of a vibrating nickel wire.'' Arthur Lynn Becker, ''Explosion spectra of the earth alkalis.'' James Murle Cork, ''Characteristic absorption of X-rays in the 'L' series for elements of atomic number 62 to atomic number 77.'' Paul Harold Geiger, ''Spectro-photo-electrical effects in argentite.'' Robert Frederick Paton, ''Vacuum-spark spectrum of silicon, λ 6700 to λ 4070.''

MINNESOTA: Archie Dayton Power, ''Coefficient of recombination of the natural ions in atmospheric air, an allied phenomena associated with weak atmospheric ionization.'' Oswald Rognley, ''Motions of ions in the atmosphere.''

NEBRASKA: Leo Gerard Raub, ''Cathode fall in helium and argon with wire cathodes.''

NORTHWESTERN: Frederick Lyons Brown, ''Determination of the wave lengths of (118) titanium lines by means of the interferometer.''

OHIO STATE: William Byron Brown, ''Thermal conductivity of metals in the solid and liquid state.''

PENNSYLVANIA: Raymond Morgan, ''Optical constants of sodium-potassium alloys.''

PRINCETON: Ora Stanley Duffendack, ''Low voltage arcs in diatomic gases. I. Hydrogen and nitrogen.'' Edward Houghton Kurth, ''Extension of the X-ray spectrum to the ultra violet.'' Yu Tai Yao, ''Low voltage arc in mercury vapor and its relation to fluorescence.''

STANFORD: George Russell Harrison, ''Absorption of light by sodium and potassium vapors.''

VIRGINIA: Fred Allison, ''Method of determining the effective wave-length of light.''

WISCONSIN: John Adams Eldridge, ''Energy losses accompanying ionization and resonance in mercury vapor.'' Louis Byrne Slichter, ''Experimental study of an acoustic system.'' Warren Weaver, ''Analytic formulation of the theory of electrodynamics.''

YALE: Brian Prime O'Brien, ''Optical dispersion of mercury.'' James DeGraff Tear, ''Short electric waves.''

Physiology

BROWN: Ralph Evans Stanton, ''Effect of hydrogen ion concentration on the retention of potassium by muscle cells.''

BRYN MAWR: Mary Drusilla Flather, "Hemosiderin content of the choroid plexus." Mary Jane Guthrie, "Cytoplasmic inclusions in cross activated eggs of Teleosts."

CHICAGO: Ralph Waldo Gerard, "Presence and significance of histamine in an obstructed bowel." George Addison Talbert, "Hydrogen ion concentration of human sweat."

COLUMBIA: Hannah Elizabeth Honeywell, "Sugar in the blood of pigeons." Cora Senner Winkin, "Analysis of the nervous control of the cardiovascular changes during occlusion of the head arteries in cats."

CORNELL: Stanley Ross Burlage, "Blood pressures and heart rate in girls during adolescence."

HARVARD: George Burrill Ray, "Oxidations *in vivo* and *in vitro*, with special reference to the action of anesthetics."

ILLINOIS: Harry Victor Atkinson, "Transformation of protein into fat and fat into carbohydrate in the body."

JOHNS HOPKINS: Antonio Luiz de Barros Barreto, "Action of X-ray on basal metabolism." Ethel May Kinney, "Physiological effects of strontium." Edith Evelyn Nicholls, "Spontaneous activity of the guinea pig."

MICHIGAN: Fichen Tsang Gi Ni, "Active response of the capillaries of frogs, tadpoles, fish, bats and men to various forms of excitation."

MISSOURI: Walter Stuntz Ritchie, "Storage of protein in the pigeon."

STANFORD: Eshref Shevky, "Physiological action of the toxin of *B. botulinus*."

WISCONSIN: Jay Lawrence Lush, "Experiments on sex-control in mammals." Sara Mae Stinchfield, "Formulation and standardization of a series of graded speech tests."

Political Science

CALIFORNIA: Malbone Watson Graham, Jr., "Developments in the law of neutrality in the course of the Great War." Harley Farnsworth MacNair, "Protection of alien Chinese." Pardaman Singh, "Tibet and her foreign relations." Benjamin Harrison Williams, "Policy of the protection of American citizens in China."

CHICAGO: Harold Foote Gosnell, "Thomas C. Platt—political manager." Albert Claire Hodge, "Retail cost accounting." Christen Jensen, "Pardoning power in the American states." Leverett Samuel Lyon, "Functional approach to social-economic data." Jonas Warren Stehman, "Financial history of the American Telephone and Telegraph Company."

CORNELL: Ernest Charles Young, "Study of the movement of farm population."

GEORGE WASHINGTON: Hartwell Stansbury Adkins, "Treaty making power in relation to the power of Congress and the power of the states."

HARVARD: Edward Conrad Smith, "Trans-Alleghany borderland in 1861."

ILLINOIS: Lloyd Milton Short, "Development of national administrative organization in the United States."

JOHNS HOPKINS: Carroll Eiker French, "Shop committee in the United States." Johannes Mattern, "Employment of the plebiscite in the determination of sovereignty." Robert Graff Merrick, "Commercial Credit Company." Tomio Nakano, "Ordinance power of the Japanese emperor."

PRINCETON: Harold Monk Vinacke, "Modern constitutional development in China."

WISCONSIN: James Lee Sellers, "Extinction of the credit class in the South, 1860 to 1870." Henry Walter Thompson, "Expansion of the federal government through the commerce clause." Jennie McMullin Turner, "Right to organize."

YALE: Gladden Whetstone Baker, "Race, nativity and parentage as factors in adult mortality in the United States." Norman Sydney Buck, "Development of the organization of Anglo-American trade, 1800 to 1850." Edwin Meyer Loeb, "Origin and evolution of human sacrifice." Harris Elwood Starr, "Biographical study of William Graham Sumner."

Psychology

BRYN MAWR: Margaret Montague Monroe: "Energy value of the minimum visible chromatic and achromatic for different wave lengths of the spectrum."

CALIFORNIA: Jean Walker, "Factors contributing to the delinquency of defective girls."

CHICAGO: Adam Raymond Gilliland, "Experimental studies of the effect on reading of changes in sensory factors." Ernest Bouldin Harper, "Socioanalysis of character." Ralph Edmond Wager, "Method of measuring fatigue of the eye." Tsu Lien Wang, "Influence of tuition in the acquiring of skill."

CINCINNATI: Charles Murdock Disermans, "Influence of music on behavior."

CLARK: Marjory Bates, "Introspective study of the Müller-Lyer illusion."

COLUMBIA: Fowler Dell Brooks, "Changes in mental traits with age." Emily Thorp Burt, "Psychological tests applied to factory workers." Albert M. Johanson, "Influence of incentive and punishment upon reaction time." Alfred Horatio Martin, "Factors and types of

voluntary choice." Dorothy Ruth Morgenthau, "Evaluation of some mental tests from the standpoint of individual analysis." Sante Naccarati, "Morphologic aspect of intelligence." Louise Elizabeth Poull, "Interests in relation to intelligence." Elizabeth Teresa Sullivan, "Mood in relation to performance."

CORNELL: Mabel Florence Martin, "Film, surface and bulky colors and their intermediates."

GEORGE WASHINGTON: Walter James Greenleaf, "Failures in vocational education: a study in individual psychology." Carl Johan Edward Liljencrantz, "Memory defects in organic psychosis." Eleanor Bennette Saunders, "Mental effects of the administration of endocrine substances in the non-endocrine psychosis."

HARVARD: Gordon Willard Allport, "Traits of personality, with application to the problem of social diagnosis."

IOWA: Wilhelmine Koerth, "Some aspects of the intelligence rating of college students."

MICHIGAN: Martha Guernsey, "Liminal intensities and the application of Weber's law to tones of different pitch."

MINNESOTA: Margaret Kincaid, "Variability in learning."

NEW YORK: Meta Louise Anderson, "Intelligence tests."

PENNSYLVANIA: Rebecca Elizabeth Leaming, "Vocational guidance at the fifteen-year-old performance level." Henry Etter Starr, "Hydrogen ion concentration of human mixed saliva considered as an index of fatigue and of emotional excitement and applied to a study of the metabolic etiology of stammering."

STANFORD: Giles Murrel Ruch, "Influence of the factor of intelligence on the form of the learning curve."

WISCONSIN: Lewis Orvin Anderson, "Causes of stuttering."

Romance

CHICAGO: Alois Richard Nykl, "Rrekontamiento Del Rrey Alisandre." Clarence Edward Parmenter, "French epistle in verse from Eustache Deschamps to the 'Deffence et illustration de la langue francoyse.'"

COLUMBIA: Nicholson Barney Adams, "Garcia Gutierry as a romantic dramatist." Mathurin M. Dondo, "Verse Libre." Maximilian Rudwin, "Satanism of Chateaubriand." Joseph Louis Russo, "Lorenzo da Ponte." Lena Evelyn Vincent Sylvania, "Dona Maria de Zayas y Sotomayor." Felix Vexler, "Studies in the esthetics of Diderot." Joseph Stanley Will, "Protestantism in France, Vol. 2, 1598 to 1629."

CORNELL: James McFadden Carpenter, Jr., "Old Spanish palatals."

ILLINOIS: Walter Henry Storer, "Virgil and Ronsard."

INDIANA: Claude E. Anibal, "Critical text, with introduction, of 'El Arpa de David' of Mira de Amescua, together with a dissertation on Lisardo, his pseudonym."

JOHNS HOPKINS: Meta Helena Miller, "Chateaubriand and English literature." Lawrence Melville Riddle, "Genesis and sources of Pierre Corneille's tragedies from Médée to Pertharite."

STANFORD: Leo George Lacombe, "Place of modernism in French thought, with special reference to Alfred Loisy."

WISCONSIN: Alexander Green Fite, "Manuscript 627 of the Berne Library, on the epic poem Godfroi de Bouillon."

Sociology

CHICAGO: Martin Hays Bickham, "Scientific antecedents of the sociology of Auguste Comte." Clarence Elmer Rainwater, "Evolution of the play movement in the United States." Samuel Caleb Ratcliffe, "Pauper law and institutions in Illinois." Dwight Sanderson, "Rural community."

COLUMBIA: Jerome Dwight Davis, "Russian immigrant." Joseph Mayer, "Public opinion and the control of the social evil." Marion Dutton Savage, "Industrial unionism in America." Sing Ging Su, "Chinese family system."

JOHNS HOPKINS: Enrique Enciso-Ruiz, "Health organization in Colombia." Morrill Leonard Ilsley, "First study of the relations between percentage of illiteracy and death rate in American cities."

MINNESOTA: Louis Angelo Boettiger, "Historical development of employers' welfare work as a phase of industrial relations."

NEW YORK: Norris R. Neifeld, "Intelligence of the negro in the United States."

PENNSYLVANIA: Bernhard Ostrolenk, "Social significance of a decreasing food production." Samuel Howard Patterson, "Family desertion and non-support; a study of court cases in Philadelphia from 1916 to 1920." Johan Thorsten Sellin, "Marriage and divorce legislation in Sweden." Donald Ramsey Young, "Motion pictures."

STANFORD: Kimball Young, "Mental differences in certain immigrant groups."

WISCONSIN: Horace Boies Hawthorn, "Social efficiency in Iowa communities." John Harrison Kolb, "Rural primary groups." Ellery

Francis Reed, "Treatment of social radicalism."

Theology

BROWN: Wallace Lester Gallup, "Individualism in New Testament literature." Arthur Godfrey Sellen, "Religion of the historic Jesus."

CATHOLIC: August Mathias Bellwald, "Christian Science and the Catholic faith." Thomas Joseph Burke, "Competence in ecclesiastical tribunals." George Leo Leech, "Comparative study of the constitution 'Apostolicæ Sedis' and the 'Codex Iuris Canonici.'" Cecelia Marie McGrath, "Development of moral concepts and a standardization of tests for moral perception." Hubert Louis Motry, "Diocesan faculties according to the code of canon law." Patrick Joseph Temple, "Boyhood consciousness of Christ."

CHICAGO: Archibald Gillies Baker, "Church and the struggle for democracy in Alto-Peru and Bolivia." Herbert Waldo Hines, "Prophet as a mystic."

HARVARD: Carl Friedrich Pfatteicher, "Development in the conception of God in German protestant hymnody."

JOHNS HOPKINS: Ovid Rogers Sellers, "Book of Joel."

NORTHWESTERN: Percy Vivian Roberts, "Moralia of Plutarch and the New Testament."

Zoology

BROWN: William Gould Vinal, "*Anemia glabra.*"

CALIFORNIA: James Daley McDonald, "*Balantidium coli* (Malmsten) and *Balantidium suis*, sp. nov., with an account of their neuromotor apparatus." Margaret Campbell Mann, "Observations and experiments on an inbred strain of *Drosophila melanogaster.*" Charles William Rees, "Neuromotor apparatus of paramecium."

CHICAGO: Kellogg Finley Bascom, "Interstitial cells of the gonads of cattle with special reference to their embryonic development and significance." Jacob Martin Essenberg, "Sex-differentiation in the viviparous teleost *Xiphophorus helleri*, Heckel." Tadachika Minoura, "Testis and ovary grafts on the hen's egg and their effects on the embryo." Pranis Baltras Siviskis, "Physiology of reconstitution in *Planaria lata.*"

COLUMBIA: Gladwyn Kingsley Noble, "Phylogeny of the *Salientia.*"

CORNELL: William J. Baerg, "Biology and control of some insects on strawberry." William Harold Brittain, "Apple sucker." Leslie Ellsworth Card, "Influence of season of hatching on egg production and related characters in White Leghorns." Francisco Mamaclay Fronda, "Temperature studies in poultry." Herbert Lester Gilman, "Some factors influencing the sterility and fertility in the bull." Katherine Lillis Slingerland, "Adipose tissue in insects." Chenfu Francis Wu, "Morphology, anatomy and embryology of *Nemoura.*"

GEORGE WASHINGTON: Waldo LaSalle Schmitt, "Report on the *Crustacea macrura* obtained by the F. I. S. *Endeavor* in Australian seas."

HARVARD: Leland Hart Taylor, "North American *Chrysididæ.*" John Douglas Tothill, "Natural control of the fall webworm (*Hyphantria cunea* Drury) in Canada." Leopoldo Bancain Uichanco, "Reproduction, embryogeny and postnatal development of aphids." Willard Leigh Waehter, "Variations of crossing-over."

ILLINOIS: Amos Henry Hersh, "Effect of temperature upon the development of the eye of *Drosophila.*" Duncan Charteris Hetherington, "Comparative studies on certain features of nematodes and their significance." Asa Orrin Weese, "Animal ecology of an Illinois elm-maple forest."

JOHNS HOPKINS: Harry Thomas Folger, "Quantitative study of the response in *Amœba* to sudden increase in illumination." Samuel Wood Geiser, "Sex-ratios and spermatogenesis in the top-minnow, *Gambusia affinis.*"

MICHIGAN: Anah Lenore McQuinn, "Genetics of curly wing in *Drosophila.*"

MINNESOTA: William Carmichael Cook, "Physical ecology of the *Noctuidæ.*"

OHIO STATE: Walter Valentine Balduff, "Biology of the striped cucumber beetle." Dwight Moore DeLong, "North American species of the genus *Deltocephalus.*" Herbert Lawrence Dozier, "*Fulgoridæ* of the southern states." Lawrence Lester Huber, "North American genus *Callimome (Chalcidoidea).*" Herbert Spencer, "Biology of the parasites and hyperparasites of Aphids."

PENNSYLVANIA: Robert Leslie King, "Homologous heteromorphic chromosomes in three species of *Pseudotrimerotropis (Orthoptera: Acrididæ).*"

PITTSBURGH: Philip Huntley Pope, "Life history of the common water newt, *Notophthalmus viridescans*, together with observations on the sense of smell."

PRINCETON: William Ruthrauff Amberson, "Kineties of the bioluminescent reaction in *Cypridina.*"

STANFORD: Frank Raymond Cole, "Terminal abdominal structures of male *Diptera.*"

YALE: Emily Lucile Moore, "Regeneration at various phases in the life history of the Infusorians *Spathidium spathula* and *Blepharisma*

undulans." Francis Huntington Swett, "Production of double limbs in amphibians."

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THE INTELLIGENCE OF PUPILS WHO REPEAT

By a previous study[1] the writer determined that the failure of the pupils who left Central High School, Syracuse, N. Y., during the year of 1920-21 was exactly two and one half times that of the pupils who remained in school during the year. These pupils had left school for good, so that speculation as to their mental ability was valueless. However, during the year of 1921-22 special classes were established at Central for pupils who had failed in various subjects. The writer was interested in finding out how many of these repeaters lacked the required mental ability to do high school work and how many were repeating because, although possessing good mental ability, they preferred to drift along aimlessly.

In an attempt to ascertain the reason for some of the failures, the writer conducted the following study during the spring term of 1922. An individual Binet-Simon test (Stanford Revision) was given to each of the 20 members of a sophomore English class for repeaters. Later, on May 23, 1922, the Terman group test was given to 91 pupils who were repeating various subjects (Latin, French, algebra, geometry, etc.). At the same time, the test was given to nine pupils who were known to be above the average in their school standing. The scores of the group test were translated into mental ages and the intelligence quotients determined.

The writer was particularly interested in three statements by Dr. Terman, since these statements seem to have some bearing upon the data obtained:

1. The pupil who tests 90 is near enough the average to make normal or almost normal progress through the eight grades, although there is some likelihood of his incurring retardation of a half a year to a year. Such a child, if persistent, may also be expected to graduate from high school, although the difficulty of making normal progress there is somewhat greater, due to the fact that his competitors in the high school are selected pupils.

2. The median intelligence quotient will usually be found considerably above 100 in the high school.

3. The median intelligence scores of pupils enrolled in Latin or algebra is usually considerably above the median for pupils of the same year enrolled in shop work.

The writer would emphasize the fact that Central High School offers no courses in vocational work, so that most of the pupils take a college preparatory or a general course.

The results of the intelligence tests were as follows:

I. The special English group (20 cases individual Binet-Simon tests).

(The class started as a group of 25, but some pupils left school before an opportunity was given to examine them.)

Pupils with I.Q.'s below 100	15 or 75%
Pupils with I.Q.'s of 100 or over	5 or 25%
Highest I.Q.	110
Lowest I.Q.	83
Average I.Q.	94
Dropped out of school (probably permanently)	9 or 45%

The writer was interested in the cases of the five pupils who were average or better and yet who were repeating an easy subject like English. He attempted to ascertain the reason why and was given the following answers:

1. S. G., I.Q. 100, was waiting eagerly for the time when he would be old enough to go to work. He said that he never wished to attend high school.

2. J. B., I.Q. 101, was a hard-working student although he was not particularly brilliant. He had been placed in the special class by mistake.

3. A. T., I.Q. 107, was also a satisfactory student. She, also, had been placed in the class through some mistake. Both J. B. and A. T. accepted their fate without a murmur, and half the term went by before it was found that they did not belong in the special group.

4. R. H., I.Q. 109, had no ambition. He was perfectly satisfied to drift along and had done this so long that he had practically no foundation of knowledge upon which to build.

5. F. S., I.Q. 110, was truly a pathetic case. The boy was dying of tuberculosis. He came to

[1] SCHOOL AND SOCIETY, August 19, 1922.

school now and then chiefly to see his friends. As he did not expect to live more than a year, he could see no value in school work.

II. The Terman Group Test.

A. Special group of nine good students.

It is interesting to compare the results obtained from the small group of good students with those of the larger groups. While the former is too small to furnish more than a mere indication of what might be expected, the superiority of these pupils over the others examined is very marked indeed.

Pupils with I.Q.'s below 100	000%
Pupils with I.Q.'s of 100 to 105	000%
Pupils with I.Q.'s over 105	100%
Highest I.Q.	132
Lowest I.Q.	108
Average I.Q.	118

B. Repeaters in various subjects (91 cases. Freshmen 56 or 61.5%, sophomores 30 or 33%, juniors 5 or 5.5%, seniors 0).

Some of the pupils of this group were repeating but one subject, but most of them were deficient in more than one.

Pupils with I.Q.'s below 100	52.8%
Pupils with I.Q.'s of 100 or better	47.2%
Highest I.Q.	124
Lowest I.Q.	75
Average I.Q.	97+

If we examine the results from this group more closely, we find that the lower quartile is far worse than the average would seem to indicate, while the upper quartile is much better. If the group is divided in four sections rather than two, a much more accurate view of the situation is disclosed.

Pupils with I.Q.'s of less than 90, Terman's minimum I.Q. for high school work	24.2%
Pupils with I.Q.'s of from 90 to 100	28.6%
Pupils with I.Q.'s of 100 to 105	22.0%
Pupils with I.Q.'s of 106 to 124	25.2%

It is, perhaps, worth while to view the results of the group tests from a slightly different angle and consider for a moment how the pupils examined stood in comparison with the 30,000 pupils who have taken the test and who have helped to establish definite norms.

The highest score in the repeating group is equaled or exceeded by but one per cent. of all the pupils, while the lowest in the group tests was exceeded by 99 per cent. of the pupils of that particular grade. Seventy per cent. of the pupils of the group of repeaters were equaled or exceeded by at least 30 per cent. of high school pupils of that grade—46 per cent. of the 70 per cent. by at least 50 per cent. while 23 per cent. were equalled or exceeded by from 75 to 99 per cent. of normal high school pupils.

When we make a final comparison of the various groups, we get the following:

	Below Average	Average or better	Average I.Q.
English specials	75%	25%	94
Unselected repeaters	52.8	47	97
Average both groups	56.7	43.3	97
Nine good students	00.0	100	118

The writer would call attention to the following points:

1. As might have been expected, the good students were considerably above the average in mental ability.

2. The group of English specials was inferior to the group of repeaters in all subjects. This is easy to explain, for English is a comparatively easy high school subject. While making another study, the writer found that English contributed next to the lowest percentage of failure—the lowest being history and the highest mathematics.

3. While approximately 25 per cent. of the group lacked sufficient ability to do successful high school work, another 25 per cent. were found to be above the average. Thus the results showed the presence of a double problem —that of doing the best possible work for those lacking ability and, at the same time, motivating the work of pupils who can but apparently won't. Indeed although slightly more than half of the group tested were below average high school intelligence, 43 per cent. were evidently repeating for some other reason. *Lack of mental ability, then, explained the failure of but 57 per cent. of the number examined,* unless it is true that a classical student must possess ability considerably above high school average in order to do successful high school work. If repeaters are to be placed in special classes, it might prove advisable to maintain two separate types—one for the lazy bright repeaters, and the other for those who are not gifted. Certainly classification based upon failure alone would not seem to be the most logical course.

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